Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

2010 US Army Corps of Engineers (USACE) Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX) Topographic Lidar: Louisiana Coast, Lake Pontchartrain and Mississippi Barrier Islands

1.2. Summary description of the data:

This Light Detection and Ranging (LiDAR) classified (ASPRS LAS classifications) dataset is a topographic survey conducted for

the Task Order 007 Aerial Survey 2010 project. This data was produced for the US Army Corps of Engineers (USACE) Joint Airborne Lidar

Bathymetry Technical Center of Expertise (JALBTCX). The LiDAR point cloud was flown at a density sufficient to support a maximum final

post spacing of 1 point per meter. 3001 International Inc. acquired flightlines between April 9 - 26, 2010. The Task Order 007 Aerial

Survey 2010 was collected under the guidance of a Professional Mapper/Surveyor. The area of coverage includes portions of the coastline

of Louisiana in the counties of Lafourche, Plaquemines, and Terrebonne, and along the south coast of Lake Pontchartrain in Jefferson and

St. Charles counties. The area of coverage for Mississippi includes the barrier islands in Harrison and Jackson counties.

Original contact information:

Contact Org: Northrop Grumman (formerly 3001 International Inc.)

Title: LiDAR Department

Phone: 251.443.6979

Email: carlos.prieto@ngc.com

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:
2010-04-09 to 2010-04-26

1.5. Actual or planned geographic coverage of the data:
W: -90.777072, E: -88.390472, N: 30.264472, S: 29.032926

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2010-07-01 00:00:00 - The Airborne Global Position System (ABGPS), inertial measurement unit (IMU), and raw scans are collected during the LiDAR aerial survey. The ABGPS monitors the xyz position of the sensor and the IMU monitors the orientation of the aircraft. During the aerial survey laser pulses reflected from features on the surface and are detected by the receiver optics and collected by the data logger. GPS locations are based on data collected by receivers on the aircraft and base stations on the ground. The ground base stations are placed no more than 20 km radius from the flight survey area.
- 2009-05-27 00:00:00 - The ABGPS, IMU, and raw scans are integrated using proprietary software developed by Optech and delivered with the Optech ALTM Gemini System. The resultant file is in a LAS binary file format. The LAS file version 1.1 format can be easily transferred from one file format to another. It is a binary file format that maintains information specific to the LiDAR data (return#, intensity value, xyz, etc.). The resultant points are referenced to the Geographic NAD83 horizontal datum and NAVD88 vertical datum.
- 2009-05-27 00:00:00 - The data is subjected to rigorous QA/QC according to the 3001 Inc. Quality Control Plan and procedures. Very briefly, a series of quantitative and visual procedures are employed to validate the accuracy and consistency of the data. Ground control is established by 3001, Inc. and GPS-derived ground control points (GCPs) points in various areas of dominant and prescribed land cover. These points are coded according to landcover, surface material, and ground control suitability. A suitable number of points are selected for calculation of a statistically significant accuracy assessment as per the requirements of the National Standard for Spatial Data Accuracy. A spatial proximity analysis is used to select edited LiDAR data points within a specified distance of the relevant GCPs. A search radius decision rule is applied with consideration of terrain complexity, cumulative error, and adequate sample size. Accuracy validation and evaluation is accomplished using proprietary software to apply relevant statistical routines for calculation of

Root Mean Square Error (RMSE) and the National Standard for Spatial Data Accuracy (NSSDA) according to Federal Geographic Data Committee (FGDC) specifications.
- 2010-09-01 00:00:00 - Metadata imported.
- 2010-09-01 00:00:00 - Metadata imported.
- 2010-10-05 00:00:00 - Dataset copied.
- 2011-09-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received classified data (ASPRS LAS classifications) in las format. The files contained LiDAR intensity and elevation measurements. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from NAVD88 heights to ellipsoid heights using Geoid03. 2. The LAS header fields were sorted by latitude and updated.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:
- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or

deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/50086

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=1065
https://coast.noaa.gov/htdata/lidar4_z/geoid18/data/1065

7.3. Data access methods or services offered:
This data can be obtained on-line at the following URL: https://coast.noaa.gov/dataviewer;

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.